

Date: Wednesday, 1/30/2008 7:56:42 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 37072	
Estimate Number : 10281	
P.O. Number :	Part Number : D3183043
This Issue : 1/30/2008 S.O. No. :	Drawing Number : D3183 REV C1
Prsht Rev. : NC	Project Number : N/A
First Issue : 1/1 Type : MACHINED PARTS	Drawing Revision : C1
Previous Run : 36666	Material :
Written By :	Due Date : 2/20/2008 Qty: 4 Um: Each
Checked & Approved By : <u>JD 08 02 30</u>	
Comment : Est Rev: Pick: A 04.02.18 New issue KJ/DS	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M174B2000X01500	17-4 SS Bar
-----	-----------------	-------------



Comment: Qty.: 0.4812 f(s)/Unit Total : 1.9249 f(s)

Material: 17-4 SS Bar per AMS 5604/5643

(M17-4-B1.500x02.000)

Identify for D3183-043

Batch: M19478

DJP 08/02/17 (4)

SF 08/02/24 (2)

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW

Cut blanks: (1.500" x 2.000") 5.500" long

DJP 08/02/17 (4)

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-3 as per Folio FA322 and Dwg D3183

Identify as D3183-3

2-Deburr

3-Scribe batch number

PTO

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	----------------------------------------



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SF 08/02/24 (5)

SF 08/02/24 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3183-043 PAR #: N/A Fault Category: Prod / Machined NCR: Yes No DQA: Yes Date: 08/02/27
 QA: N/C Closed: Yes Date: 08/02/27

NCR: <u>37072</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/02/28	3.0.	First part move out of jig, I put it back and the spigot come oval. When it was round to was too small. R.C. NO IN IN progress. Too put a clamp.	<i>[Signature]</i>	Scrap: 1 Qty 1 No replace	<i>[Signature]</i> 08/02/28	<i>[Signature]</i> 08/02-26	<i>[Signature]</i> 08/02-26	<i>[Signature]</i> 08/02-26
			<i>[Signature]</i>	Scrap: Replace. <u>1</u>	<i>[Signature]</i> 08/02-26	<i>[Signature]</i> 08/02-26	<i>[Signature]</i> 08/02-26	<i>[Signature]</i> 08/02-26

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:56:43 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 37072

Part Number: D3183043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



(5)

Comment: SECOND CHECK

JL 08/02/25

6.0

D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-21

Bolt B37478

mk 08/02/26

(5)

7.0

D3183045

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3183-045 Bearing Ass

B36638

mk 08/02/26

(5)

(5)

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3183-043 as per Dwg D3183.

mk 08/02/26

(5)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

mk 08/02/26

(5)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 88

mk 08/02/26

(5)

SP

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

mk 08/02/27

(5)

Job Completion



mk 2008/2/27

(5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 37072
Description: Bracket		Part Number: D3183-3
Inspection Dwg: D3183	Rev: C1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	.190	✓			
R0.063	+/-0.010	.063	✓			
0.182	+/-0.010	.179	✓			
0.070	+/-0.010	.072	✓			
0.100	+/-0.010	.110	✓			
Ø0.201 x 0.100	+/-0.010	.200	✓			
0.182	+/-0.010	.182	✓			
5.32	+/-0.030	5.325	✓			
5.036	+/-0.010	5.038	✓			
2.120	+/-0.010	2.130	✓			
1.290	+/-0.010	1.291	✓			
0.365	+/-0.010	.366	✓			
0.218	+/-0.010	.212	✓			
1.030	+/-0.010	1.030	✓			
1.90	+/-0.030	1.889	✓			
1.012	+/-0.010	1.009	✓			
Ø0.201 x 0.100	+/-0.010	.201 x .102	✓			
0.786	+/-0.010	.794	✓			
Ø0.392	+0.002/-0.000	.392	✓			
R0.19	+/-0.030	.190	✓			
3.954	+/-0.010	3.955	✓			
0.162	+/-0.010	.160	✓			
R0.19	+/-0.030	.190	✓			
R0.25	+/-0.030	.250	✓			
4.26	+/-0.030	4.266	✓			
2.080	+/-0.030	2.080	✓			
1.155	+/-0.010	1.155	✓			
0.162	+/-0.010	.161	✓			
0.36	+/-0.030	.360	✓			
0.615	+/-0.010	.605	✓			
0.435	+/-0.010	.436	✓			
0.200	+/-0.010	.201	✓			
0.381	+/-0.010	.389	✓			
0.032	+/-0.010	.030	✓			

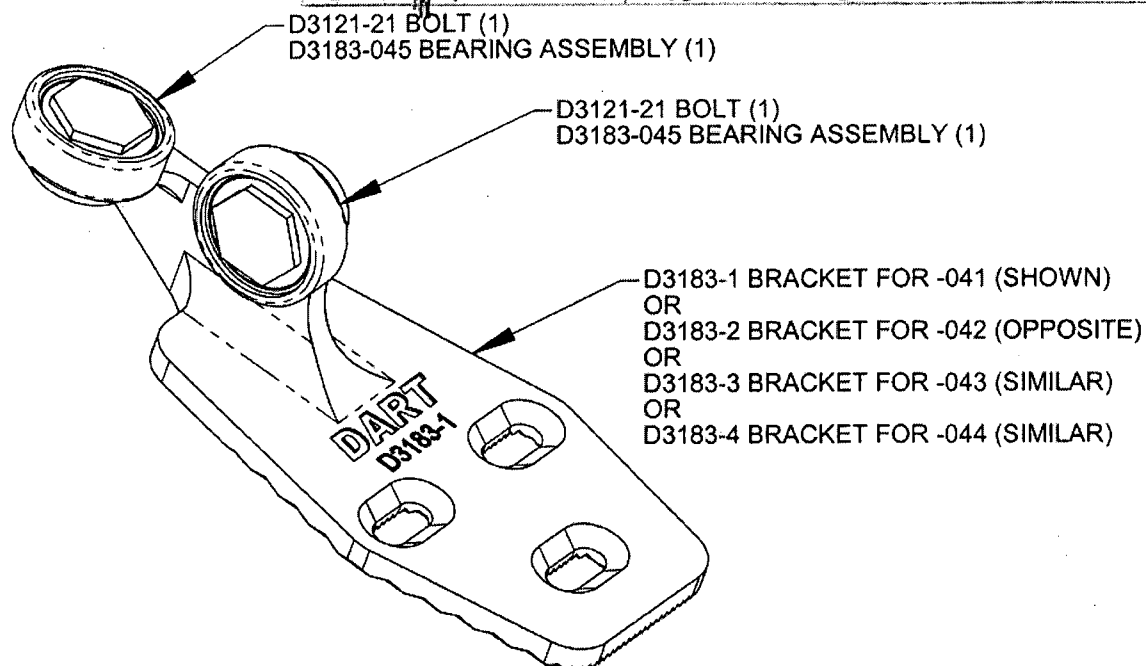
Measured by: S.F.	Audited by: S.D.	Prototype Approval:	N/A
Date: 05/02/24	Date: 08/02/24	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3183-043	KJ/RF	
B	04.03.15	Changes as per revision C	KJ/JLM/RF	
C	06.03.09	Dwg Rev update	KJ/JLM	
D	08.01.28	0.182 dimension removed	KJEC/DD	

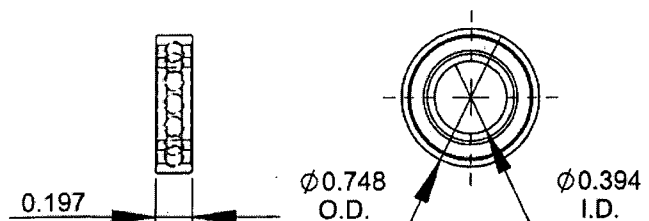
DART

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DESIGN #	DRAWN BY IP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A.	03.01.24	NEW ISSUE	
B.	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C.	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED
04.03.01

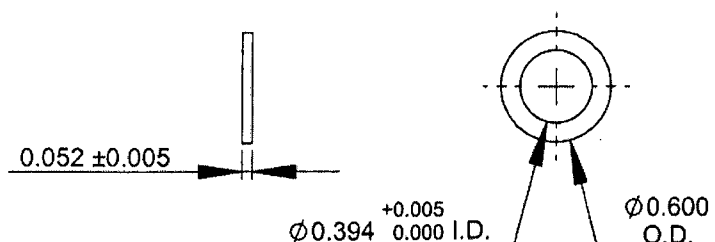
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES

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D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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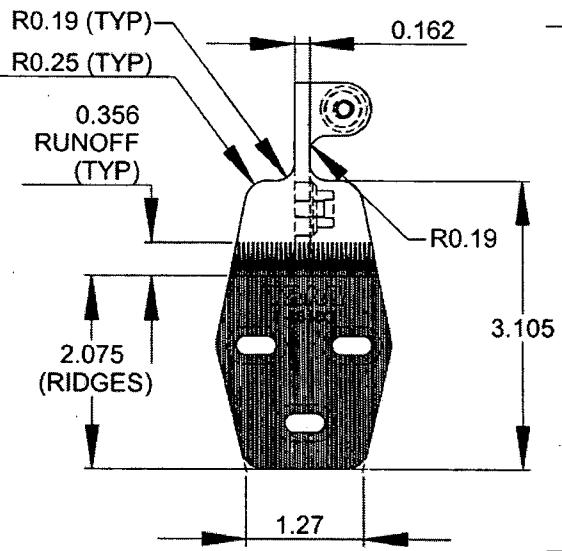
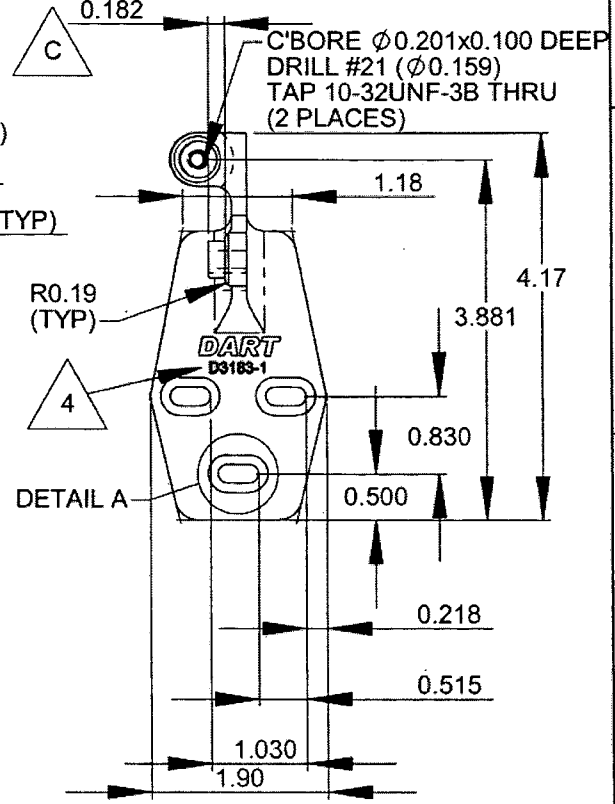
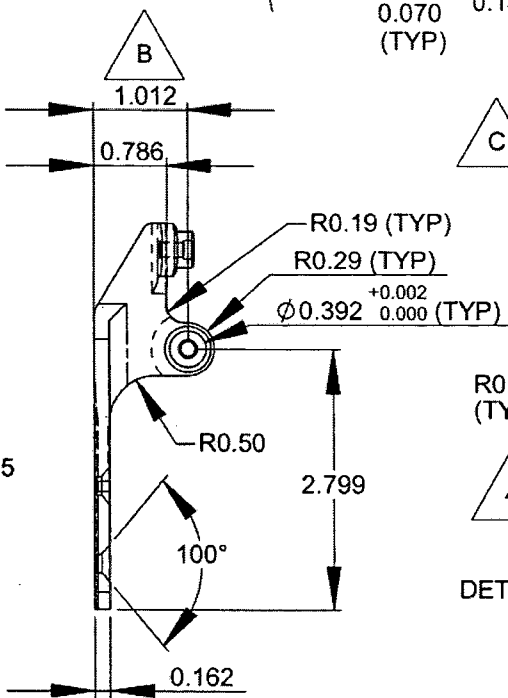
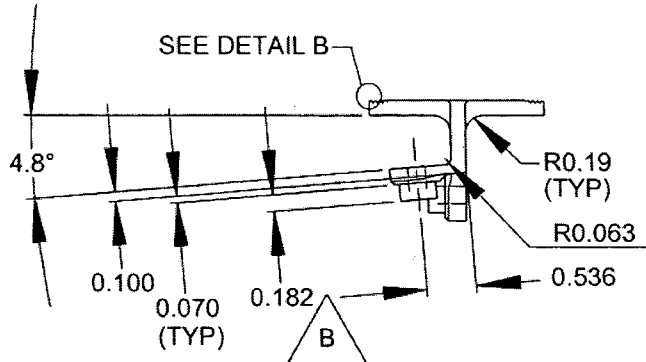
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DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 2 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2

RELEASED
04-03-01



D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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DETAIL B

0.070 (TYP)

0.182

B

0.182

C

0.02 (TYP)

0.00 (TYP)

R0.19 (TYP)

R0.063

0.536

C'BORE $\phi 0.201 \times 0.100$ DEEP
DRILL #21 ($\phi 0.159$)
TAP 10-32UNF-3B THRU
(2 PLACES)

1.18

R0.19 (TYP)

DART

3

5.036

5.32

2.120

1.290

0.365

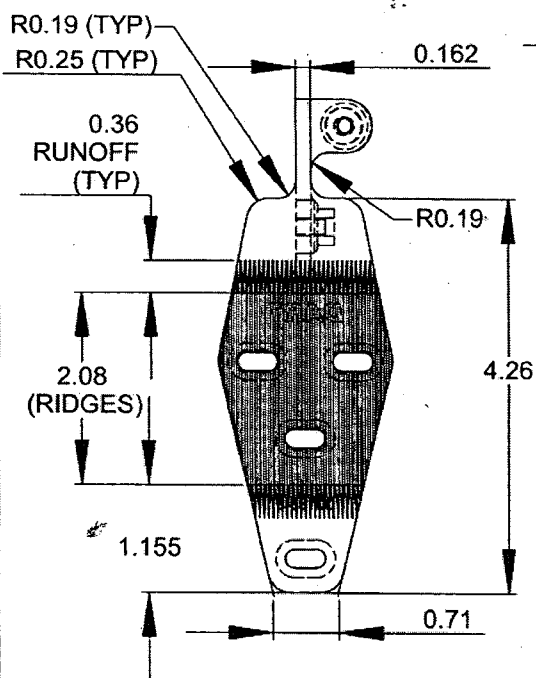
0.218

0.515

1.030

1.90

DETAIL A



2) BREAK ALL SHARP EDGES 0.005 TO 0.015
3) ENGRAVE DART P/N & LOGO AS SHOWN
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

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0.162

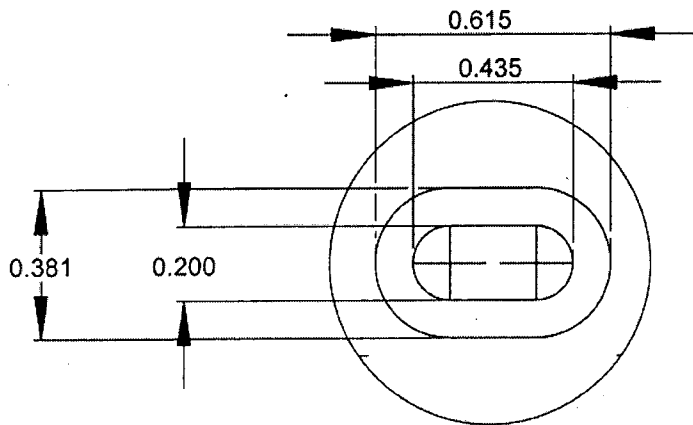
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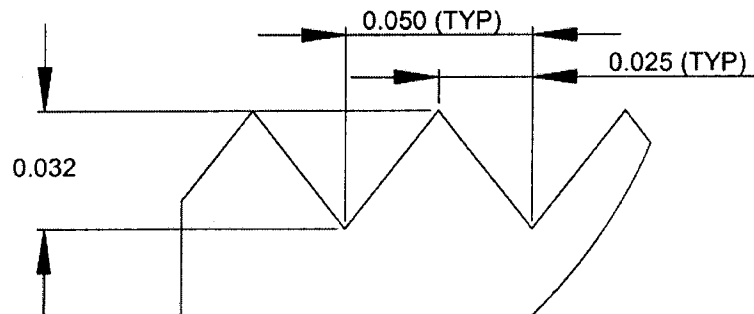


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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



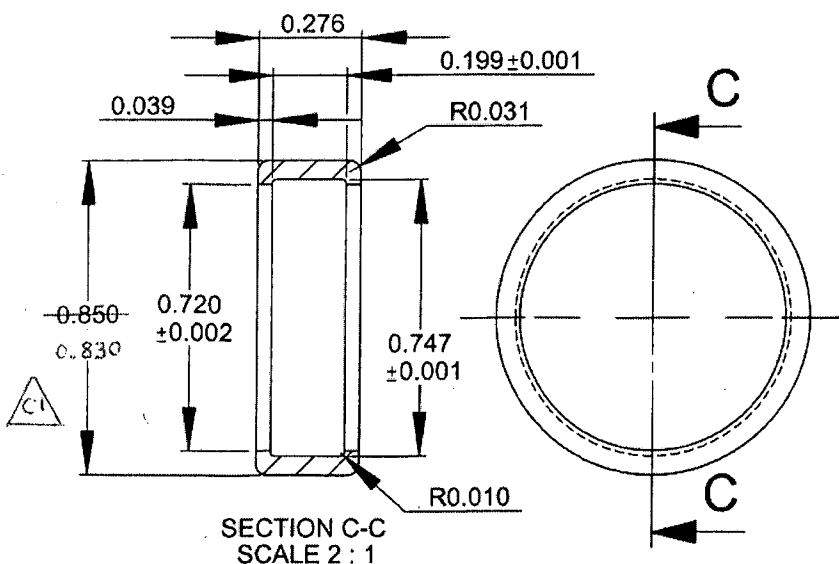
DETAIL A (2 : 1)

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04.03.01 *[Signature]*



DETAIL B (20 : 1)

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NO. 37072



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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